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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/798,100

03/11/2004

G. Ronald Morris

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6052

1912

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04/17/2008

AMSTER, ROTHSTEIN & EBENSTEIN LLP  
90 PARK AVENUE  
NEW YORK, NY 10016

EXAMINER

ROZANSKI, MICHAEL T

ART UNIT

PAPER NUMBER

3768

MAIL DATE

DELIVERY MODE

04/17/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/798,100	<b>Applicant(s)</b> MORRIS ET AL.	
	<b>Examiner</b> Michael Rozanski	<b>Art Unit</b> 3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-12, 17-21, 23 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-12, 17-21, 23 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/7/08 has been entered.

### ***Claim Objections***

Claims 1-6, 13-16, 22, and 24 are objected to because of the following informalities: Per 37 CFR 1.121, non-elected claims should have "withdrawn" as the claim status identifier, as they are non-elected. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 8 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The phrase citing "a portion coupled around at least part of said portion of the body" appears to improperly include the portion of the body as part of the claimed invention.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 10, 17, 20, 21, 23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blakely et al (US 5,038,785).

Blakely et al disclose an apparatus for producing a signal representing both the motion of an exterior portion of the body of a patient in a magnetic field and an ECG of the patient in the field. First and second electrodes 30 are attached to the patient for generating an ECG indicative of the cardiac cycle (col 3, lines 27-68). First and second leads are attached to the electrodes. The leads are wires that are adapted to enclose at least part of the exterior portion of the patient body (see figure 1, where leads cover a portion (though not entirely enclosing) of the body as currently claimed). A respiratory cycle monitoring means 32 monitors the patient's respiratory cycle via motion of the exterior portion of the patient (col 3, lines 54-68). The output of the ECG leads and the respiratory monitor means 32 is input into a patient monitor circuit 34, which amplifies and processes the monitored cardiac and respiratory cycle data (col 4, lines 1-30). Furthermore, the ECG signal representing the cardiac cycle will also inherently have motion artifacts due to patient movement (and subsequently movement of the leads) in the magnetic field. Therefore, the output of the monitor circuit 34 has a component of the exterior portion of the body induced in the ECG lead and a second component that represents the actual ECG.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 11, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blakely et al in view Morris, Sr et al (US 6,148,229).

Blakely et al disclose all features of the current invention but do not disclose a cradle or the various components of the voltage measuring device as claimed.

Morris, Sr. et al disclose a system and method for measuring motion of a portion of the body of a patient and an electrocardiogram of a patient in a magnetic field including a first and second electrode 40 attached to a patient, first and second high resistance ECG leads 50 connected to first and second electrodes, respectively, one of which encloses a part of the body of the patient, and a voltage measuring device incorporated into a Faraday shield 55 (col. 4, line 35-col. 5, line 7). A cradle 70 is coupled around at least a part of the portion of the body of the patient coupled to one of the ECG leads (col. 4, line 53-col. 5, line 3).

Morris, Sr. et al also disclose all features including a Faraday shield 55, two RF filters 120 mounted in the shield, each having an input coupled to a respective ECG lead and an output, a differential amplifier 140 mounted in enclosure with its inputs

coupled to respective output of one of the RF filters, a gradient filter 190 (i.e. averaging filter) coupled to output of differential amplifier, and a transmitter 160 having an output representative of the motion of a portion of the body (col. 4, line 53-col. 5, line 3; see figure 2). It would have been obvious to the skilled artisan to modify Blakely et al, as taught by Morris, Sr, in order to improve signal differentiation in the voltage measuring device.

Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blakely et al and Morris, Sr. as applied to claims 8 and 18 in further view of Imran (US 5,327,888).

Blakely et al and Morris, Sr. substantially disclose all features of the current invention including including two primary field coils 70 that function to cradle a part of the body (see figure 1 of Morris, Sr), but do not disclose a cradle formed from a thin polycarbonate plastic strip. In the same field of endeavor, Imran teaches a cradle for ECG purposes comprising thin polycarbonate plastic material (col. 2, lines 14-37). It would have been obvious to one with ordinary skill in the art at the time the invention was made to have incorporated this teaching in order to have a cradle that is made of temperature resistant material.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blakely et al as applied to claim 7 in view of Stocklin (US 5,193,108).

Blakely et al and Morris, Sr. substantially disclose all features of the current invention including a Faraday shield 55, two RF filters 120 mounted in the shield, each having an input coupled to a respective ECG lead and an output, a differential amplifier 140 mounted in enclosure with its inputs coupled to respective output of one of the RF filters, a gradient filter 190 (i.e. averaging filter) coupled to output of differential amplifier, and a transmitter 160 having an output representative of the motion of a portion of the body (col. 4, line 53-col. 5, line 3; see figure 2 of Morris, Sr.). Blakely/Morris, Sr. et al do not disclose one input of the differential amplifier coupled to the Faraday shield. In the same field of endeavor, Skocklin teaches of coupling of an input of a differential amplifier to a Faraday shield (col. 2, lines 3-13). It would have been obvious to one with ordinary skill in the art at the time the invention was made to have incorporated this teaching in order to obtain a desired input into the second input of the differential amplifier.

### ***Response to Arguments***

Applicant's arguments with respect to claims 7-12, 17-21, 23, and 25 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Rozanski whose telephone number is 571-272-1648. The examiner can normally be reached on Monday - Friday, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric F Winakur/  
Primary Examiner, Art Unit 3768

MR